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ABSTRACT

The purpose of this project was to test the effect of an intensive acquisition effort in one region of the nation (Connecticut, Maine, New Hampshire, Rhode Island, and Vermont); and develop selection criteria, indexing strategies, and abstract formats congruent with user needs. The staff of The Center for Vocational and Technical Education (CVTE) was to develop the initial scope statement on which to base the acquisition of materials for the project. The New England Resource Center for Occupational Education (NERCOE) was subcontracted to develop a mailing list of potential sources of materials and was to create in cooperation with CVTE, acquisition announcements and request letters to 5,600 New England educators and various other sources. Further CVTE was to engage consultants to develop indexing strategies and abstract formats, and to establish a panel who would set up the criteria on which to base material selection for input into the ERIC system. Jointly CVTE and NERCOE were to prepare the required progress, interim, and final reports. The findings presented are based on data collected through (1) tabulation of document numbers, (2) questionnaire and telephone interviews, and (3) selection decision records. The conclusions and recommendations are presented in detail through tabulated charts and in the various materials appended. (Author/BP)

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FINAL REPORT

Project No. V257014

Grant No. OEG-0-72-4840

A MODEL FOR ACQUISITION AND SELECTION OF CAREER EDUCATION INSTRUCTIONAL MATERIALS

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July 15, 1973

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Foreword

The project, "A Model for Acquisition and Selection of Career Education Instructional Materials," resulted in findings, conclusions, and recommendations which should be helpful to information system planners and operators. Although regionalization of acquisition efforts did not prove feasible and more study is needed on selection procedures, new abstracting and indexing guidelines can be recommended.

The efforts of the sub-contractor, the New England Resource Center for Occupational Education (NERCOE), should be noted. Appreciation is expressed to Dr. Ferucio Freschet, NERCOE project manager. Special acknowledgement should be accorded Mr. Dalton McAfee, graduate research associate, for his work in managing documents, collecting and analyzing data, and preparing reports.

Joel H. Magisos
Project Director

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INTRODUCTION

Problem

Career education promises to be one of the most revolutionary changes to occur in public education during the second half of the Twentieth Century. It will unify the curriculum around a career development theme and will endeavor to provide each student with awareness, orientation, exploration, and preparation for a lifelong career congruent with occupational opportunities, personal aspirations, and individual abilities.

Implementation of career education requires new curriculum strategies, re-deployment of extant instructional materials, and development of new materials. New strategies are being developed in four USOE-sponsored models: the school-based comprehensive career education model, the employer-based model, the home-based model, and the residential model. Initial work on models has revealed the need for a system to obtain and select from among extant instructional materials appropriate to the objectives of the models. In addition, many educational practitioners engaged in implementing career education in local settings need materials. It was believed that many useful instructional materials had already been developed in state and local education agencies and institutions. Acquiring instructional materials from these sources has been difficult for a variety of reasons, principal of which has been the lack of information on the nature and whereabouts of these materials.

Purpose

The purpose of the project was to test the efficacy of an intensive acquisition effort in one region of the Nation; and develop selection criteria, indexing strategies, and abstract formats congruent with user needs.

Objectives

The specific objectives of the project which support the purpose were:

1. Acquisition of career education instructional materials from state-level and local sources in the New England region (i.e., Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont). Contributory objectives were--
   a. A definition of the expanded scope of the acquisition effort.
   b. Identification of sources of instructional materials in the region.
   c. A comparison of the acquisition yield in quantity and quality with known norms.
2. Improved selection and description techniques. Contributory objectives included--
   a. Establishment of criteria to ensure appropriate input to the information system based on user needs.
   b. Development of indexing strategies to permit retrieval on the basis of potential use.
   c. Development of abstract formats which facilitate users' selection of materials for their use.

PROCEDURES

Planned Methodology

The staff of The Center for Vocational and Technical Education (CVTE) was to develop an initial scope statement upon which to base acquisition of materials for the project, refining this statement after experience with the resultant input of instructional materials. The staff of the New England Resource Center for Occupational Education (NERCOE) was to develop a mailing list of potential sources of material and was to create, in cooperation with CVTE, acquisition announcements and request letters. CVTE and NERCOE were to jointly develop procedures for handling of acquired materials to assure their expeditious input to ERIC. The initial scope statement was developed by CVTE and cleared with NERCOE and BAOE/USOE (Appendix 1). NERCOE developed a mailing list of 5,600 New England educators. NERCOE's David Roy and CVTE's Daryl Ellsworth met to develop procedures for handling acquired materials (Appendix 2).

NERCOE was to contact identified potential sources in successive mailings, through announcements in NERCOE and state agency newsletters, and directly by Educational Information Consultants (NERCOE staff strategically located in the New England region). Over 5,600 New England educators were contacted with a form letter and reply card (Appendix 3). Follow-up letters were sent to 4,700 non-respondents and 200 respondents by NERCOE to acquire materials (Appendix 4).

CVTE was to work with a panel of informed, representative New England educators to establish initial criteria upon which to base selection from among acquired materials for input to the ERIC system. A second group of New England educators was to assess the resultant input and refine these criteria. The first panel was convened on December 8, 1972. The meeting

resulted in new "Guidelines for Abstracting" and "Guidelines for Indexing" (Appendix 5, 6). Other plans were developed to assess the results and are described below under "Necessary Changes."

CVTE was to engage consultants to develop indexing strategies and abstract formats in the light of user needs identified by the first panel. These strategies and formats would be assessed by the second panel. Guidelines for indexing and abstracting (Appendix 5, 6) were instead developed by CVTE staff and were to be assessed in a controlled experiment involving the first panel.

CVTE analyzed data on the acquisition and compared it to norms established in past acquisition activity. CVTE analyzed acquisition data and compared it to previous acquisitions. Acquisitions from the New England region was not appreciably changed as a result of the project.

CVTE and NERCOE were to prepare required progress and interim reports, and to prepare a final report which was to recommend the intensity of acquisition effort, selection criteria, indexing strategies, and abstract formats. Resultant input of material was to become part of the national collection and be accessible and available to educators and others. NERCOE was expected to arrange for distribution of lists of project output to New England educators. The primary responsibility for reporting fell on CVTE as the prime contractor as CVTE kept records, analyzed data, etc. A check with the NERCOE project manager was made each time, however. Materials acquired by the project were selected for inclusion in ARM, AIM, and RIE as appropriate. In the acquisition request, NERCOE promised contributors that NERCOE would issue a catalog of acquired materials.

Cooperative Arrangements

CVTE had established a schedule for project events. Because of problems unique to the New England region, NERCOE was later in its initial acquisition

contact than had been planned. This resulted in delay in processing because materials were late. NERCOE did contact a large number of New Englanders and followed up vigorously; in fact, at a greater level of effort than warranted by project funding.

Necessary Changes

The late arrival of materials made it impractical to convene a second panel to review selection, abstracting, and indexing. It was decided to abort plans to meet with a second panel of New England educators in favor of another plan to serve project objectives.

The new plans called for (1) the telephone interview of earlier panel members to get reactions to alternative abstracting and indexing techniques, (2) comparison of CVTE document selections to that of an expert consultant, and (3) an intensive study of the acquisition process with NERCOE's educational information consultants.

Review of Acquisitions

CVTE personnel (i.e., project director and research associate) met with NERCOE staff (i.e., project manager and educational information consultants) to review NERCOE's experiences in acquiring materials from state and local agencies. A list of questions were developed to guide the discussions (Appendix 7) and a summary of the findings are incorporated in the Final Report.

Experimental Comparison of Abstracting and Indexing Techniques

The telephone interview of the first panel included the following tasks:

(1) Development of an abstract outline and index guidelines.

(2) Development of an interview schedule which would elicit the opinions of panel members with request to old and new document treatment (abstracting and indexing).

(3) Selection of five AIM documents that had already been indexed and abstracted by old methods to receive new treatment.

(4) Independent abstracting and indexing of the five AIM documents, using new abstract outline and index guidelines.

(5) Contact of the first New England panel of educators to arrange for review of resumes and telephone interview.

(6) Pairing, coding, formating, and sending of resumes to panel.

(7) Conduct of telephone interviews with panel members using the interview schedule.

(8) Compilation and analysis of data.

Comparison of Document Selection

An expert consultant was commissioned during the final stages of the project to reselect 50 of the 109 documents acquired by NERCOE. Comparisons to determine the extent to which the expert independently selected documents for AIM were conducted and are reported in the findings.

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The procedures, described in the previous section, were designed to obtain findings upon which to base conclusions and recommendations. The major purpose of the project was to test the efficacy of an intensive acquisition effort in one region of the Nation; and to develop selection criteria, indexing strategies, and abstract formats congruent with user needs. In question was whether a national information clearinghouse (i.e., the ERIC Clearinghouse on Vocational and Technical Education) should employ the services of a regional agency (e.g., New England Resource Center for Occupational Education) to sweep a region for state and locally developed instructional materials. Also at issue was whether existent selection criteria, indexing strategies, and abstract formats should be changed to better serve user needs.

The intensive acquisition effort was conducted in six states (i.e., Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont) with the assistance of a sub-contractor, the New England Resource Center for Occupational Education (NERCOE). NERCOE used the services of educational information consultants located in the states. The development of criteria, strategies, and formats was by project staff with the assistance of a panel of eight New England educators chosen by the NERCOE staff. Selection decisions by an expert consultant and the project staff were compared.

Findings

The findings presented in this section are based on data collected during the course of project activities. Three means of data collection were employed: (1) tabulation of document numbers, (2) questionnaire and telephone interviews, and (3) selection decision records.

Data are presented in tables as frequencies and totals of questionnaire and telephone interview items (Appendix 8). The findings reported in this section are the basis of conclusions and recommendations presented in following sections.

Table I

COMPARISON OF ACQUISITIONS BETWEEN 1971-72 AND 1972-73

State	Documents Acquired and Selected for AIM, ARM, or RIE							
	1971-72*				1972-73			
	AIM	ARM	RIE	Total	AIM	ARM	RIE	Total
Connecticut	7	14	0	21	3	0	1	4
Maine	0	4	0	4	11	0	0	11
Massachusetts	1	20	0	21	2	1	0	3
New Hampshire	1	4	0	5	0	1	0	1
Rhode Island	0	1	0	1	11	1	0	12
Vermont	0	0	0	0	0	0	0	0
Totals	9	43	0	53	27	3	1	31

*Taken from the first three issues of AIM and ARM (1971-1972).

Table I shows the number of documents acquired and selected in 1971-72 as compared with the number of documents acquired in 1972-73. There were fifty-three documents acquired and selected for AIM, ARM, and RIE during

the year of 1971-72 as compared to only thirty-one acquired and selected for AIM, ARM, and RIE during the year of 1972-73.

A panel of New England educators met with CVTE staff and suggested different content for abstracts. The CVTE staff developed a new abstract outline based on these suggestions. Five documents were selected randomly for independent treatment (i.e., re-abstracted, using the new outline). The new and old abstracts were placed in a questionnaire in random fashion for review by the eight panel members (Appendix 8). Panel members were to select the preferred abstract without knowing which method was represented in the abstract.

Table II

ABSTRACT SELECTION

Number of Document	Old Method	New Method
Document I	3	5
Document II	3	5
Document III	3	5
Document IV	2	6
Document V	3	5
Totals	14	26

Table II shows selections made by the eight respondents. Of the five documents, fourteen of the forty selections favored the old method; twenty-six favored the new method.

Table III

COMMENTS CONCERNING ABSTRACTING

Complimentary Comments	Frequency	
Comments	Old Method	New Method
1. Include source of document	6	5
2. More descriptive	5	5
3. Very specific	3	8
4. More detailed	3	3
5. Very complete	3	2
6. Very concise	3	0
7. Very well outlined	2	3
8. Identifies grade level	2	1
9. Contains sequential listings	0	5
10. Others	0	0
Total	26	35

Table III shows the complimentary comments made by the eight respondents concerning the old and new methods of abstracting. Of the fifty-one complimentary comments, twenty-six complimented the old method and thirty-five complimented the new method of abstracting.

Table IV

COMMENTS CONCERNING ABSTRACTING

Critical Comments	Method of Frequency	
Comments:	Old Method	New Method
1. Very general	6	1
2. Less descriptive	5	1
3. Less detailed	4	0
4. Omit sequential listings	4	0
5. Include source of document	2	2
6. Too concise	2	0
7. Too lengthy	1	2
8. Abstract very vague	1	1
9. Too specific	0	2
10. Too complete	0	2
11. Others	0	0
Total	25	11

Table IV shows the critical comments made by the eight respondents concerning the old and new methods of abstracting. Of the thirty-six critical comments, twenty-five criticized the old method, and eleven criticized the new method of abstracting.

Using the same methods as for abstracting, new and old indexing strategies were applied to each of the five randomly-selected documents. The questionnaire required that the eight panelists choose a preferred index set.

Table V

SELECTION OF INDEX TERMS

Number of Document	Old Method	New Method
Document I	0	8
Document II	3	5
Document III	3	5
Document IV	4	4
Document V	3	5
Totals	13	27

Table V shows selections by the eight respondents. Of the five documents, thirteen of the forty selections favored the old method; twenty-seven favored the new method.

Table VI

COMMENTS CONCERNING INDEXING

Complimentary Comments	Method of Frequency	
Comments	Old Method	New Method
1. More comprehensive	2	4
2. More descriptive	2	6
3. Very complete	2	3
4. Very useful	1	2
5. Very clear	1	3
6. Very concise	1	3
7. Relevant to abstract	1	4
8. Include grade levels	1	4
9. Others	0	0
Totals	11	29

Table VI shows the complimentary comments made by the eight respondents concerning the old and new methods of indexing. Of the forty complimentary comments concerning indexing, eleven complimented the old method and twenty-nine complimented the new method of indexing.

Table VII

COMMENTS CONCERNING INDEXING

Critical Comments	Method of Frequency	
Comments:	Old Method	New Method
1. Too general	6	2
2. Terms too vague	3	2
3. Very misleading	2	2
4. Too specific	2	1
5. Omit grade levels	1	1
6. Terms are limited	1	1
7. Less descriptive	1	0
8. Exclude grade levels	1	0
9. Irrelevant to abstract	1	0
10. Others	0	0
Totals	17	9

Table VII shows the critical comments made by the eight respondents concerning the old and new methods of indexing. Of the twenty-six critical comments, seventeen criticized the old method, and nine criticized the new method of indexing.

The 109 documents acquired in the project were processed along with other documents acquired by CVTE with no special considerations. Abstracting and indexing were routinely performed after selections were made using regular CVTE criteria. The re-abstracting and re-indexing of five randomly-selected documents was for the purpose of testing the desirability of using new abstract formats and indexing strategies.

The selection decision of the CVTE staff was compared with independent selection of 50 documents randomly selected from among the 109 project documents by a knowledgeable expert (Mr. Jay Wood, Administrator, Program Development, State Coordinating Council for Vocational Education, Olympia, Washington). Table VIII shows the comparisons.

Table VIII

COMPARISON OF SELECTIONS

The Accession Number of Documents	CVTE Staff		Knowledgeable Expert	
	Selected	Rejected	Selected	Rejected
1	X			X
3		X	X	
4		X	X	
5		X		X
9		X		X
10		X	X	
11		X	X	
12		X		X
13		X	X	
16	X			X

The Accession Number of Documents	CVTE Staff		Knowledgeable Expert	
	Selected	Rejected	Selected	Rejected
17	X		X	
20	X		X	
21	X		X	
22	X		X	
24	X		X	
25	X		X	
26	X			X
29	X		X	
31		X	X	
33		X	X	
34	X		X	
35	X			X
53	X		X	
57	X		X	
58	X		X	
62	X		X	
73		X	X	
75	X		X	
76	X		X	
77	X		X	
78	X		X	
79	X			X
80	X		X	
81	X		X	

The Accession Number of Documents	CVTE Staff		Knowledgeable Expert	
	Selected	Rejected	Selected	Rejected
82		X		X
83		X	X	
84		X		X
87		X		X
88	X			X
92	X			X
93	X			X
94	X		X	
95	X		X	
100		X		X
101		X		X
102		X		X
103		X		X
108		X		X
109		X	X	
67	X		X	
Totals	29	21	30	20

It is interesting to note that total selections were 29 by staff and 30 by the expert. There were differences in specific selections. The expert disagreed with CVTE staff selections in 18 of the 50 cases compared.

In spite of difference in selection decisions by expert and CVTE staff, the rate of rejection was nearly the same. The selection-rejection frequencies are shown in Table IX.

Table IX

SELECTION OF DOCUMENTS FOR INCLUSION

Selection Decision	Number of Documents	Percentage
Selected for inclusion in systems	54	49.5
Rejected	55	50.5

The rejection of 50.5 percent of the documents acquired in the New England region exceeds the average system rejection of 30 percent by a notable amount.

Conclusions

Based on the findings, several conclusions can be drawn relative to acquisition, selection, abstracting, and indexing.

1. Intensive acquisition efforts conducted on regional basis involving an intermediary agency is not cost-effective, efficient, or productive.

   Evidence for this conclusion is based on comparisons between 1971-72 and 1972-73 and shown in Table I of the Findings. This was supported in discussions with the NERCOE project manager and educational information consultants.

2. More study is needed on selection criteria and procedures.

   Differences in the selections by CVTE staff and a knowledgeable expert were large enough to conclude that there is reasonable doubt about the reliability of selection criteria or that practitioners (represented by the expert) needs are not being met by CVTE staff selections.

3. Use of new "Guidelines for Abstracting" (Appendix 5) on instructional materials is desirable.

   The panel of New England educators favored abstracts resulting from use of new guidelines as shown in Table II. They chose new abstracts more frequently; they had more complimentary comments and fewer critical comments about new abstracts (Table III and IV).

4. Use of new "Guidelines for Indexing" (Appendix 6) on instructional materials is desirable.

   New England educators chose sets of index terms resulting from use of the new guidelines more frequently (Table VI). They had more complimentary comments (Table VII) and fewer critical comments (Table VIII) about set index terms resulting from the new guidelines.

Recommendations

Recommendations resulting from the project are based on the findings and conclusions.

1. It is recommended that the acquisition of instructional and other materials for a national information system, such as ERIC or AIM and ARM, continue to be centralized as in the past.

   This recommendation is based upon the conclusion that use of an intermediary agency in acquisition is not cost-effective, efficient, or productive. Both CVTE and NERCOE observers

agree upon this conclusion and the acquisition yield seems to corroborate the conclusion.

2. It is recommended that a study be undertaken to determine if and why information system staff members differ in their selection of documents from that of practitioners.

Only one expert consultant was used to check CVTE staff selection decisions. Although both selectors selected the same number of documents, there was disagreement 36 percent of the time. It can be speculated that either the criteria were unevenly applied or that the criteria lacked reliability. It also could be speculated that the criteria were inappropriate to the needs of the user. Needed is a study which would result in a validated set of criteria based on user needs.

3. It is recommended that new "Guidelines for Abstracting" and "Guidelines for Indexing" be adapted for use in abstracting and indexing instructional materials.

Although further evidence through a replication of the study is needed, there seems to be sufficient evidence that the new guidelines should be used to abstract and index instructional materials.

4. It is recommended that the study of user preferences for abstracts and index term sets be replicated with other subjects and in other regions.

A replication of the abstract and index set comparisons is needed, primarily because the study subjects were the same individuals that served on the panel that made input to the guidelines. Further, there may be differences between regions.

SUMMARY

The project, "A Model for Acquisition and Selection of Career Education Instructional Materials," resulted in several useful recommendations.

Intensive efforts by a regional agency to acquire instructional materials for a national information system proved to be costly and ineffective in comparison to direct effort by the central Clearinghouse.

Project activity left the question of selection criteria still much in doubt. Selection of documents by an expert consultant and the CVTE staff were at the same rate (e.g., number selected, number rejected), but notably different with respect to specific documents. Further study is needed in the area of selection to meet user needs. Two questions must be answered: (1) Are user needs for materials incongruent with selection criteria, and (2) how, if incongruent, should criteria and procedures for selection be changed?

Changes in abstract formats and indexing strategies may be made with some confidence that changes will better serve users.

Lastly, the few documents collected as a result of the project activity contribute to the total collection.

APPENDIXES

APPENDIX 1

8/3/72

A MODEL FOR ACQUISITION AND SELECTION OF CAREER EDUCATION INSTRUCTIONAL MATERIALS

Scope of Acquisition

The mission of the project is to acquire materials which contribute to the development of educational programs focusing upon the career development of individuals at all levels, pre-school through adulthood. Most of these programs will be based in schools, but may include those which interplay with community and local industry, leading toward productive employment of the student. Within the scope are programs infused with concepts and practices which advance individuals through stages of career awareness, exploration, and preparation for a full range of careers. These programs may include a wide variety of traditionally academic subjects such as mathematics, English, social studies, or science, and all areas of vocational and practical arts education. Materials may include textbooks, curriculum guides, study guides, teaching guides, program guides, resource material, audiovisual aids, student handbooks, research reports, conference proceedings, bibliographies, dissertations, guidance manuals, and interpretive papers.

APPENDIX 2

CVTE/NERCOE
Acquisition Procedures

I. INTRODUCTION

NERCOE has subcontracted with CVTE to undertake the project of acquiring career education instructional materials developed in the six New England states of Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, and Vermont. This activity will be accomplished by the intensive efforts of three state-based Educational Information Consultants (EIC's).

In order to prevent overlap of scope in this acquisition effort, CVTE agrees to discontinue efforts of acquiring instructional materials in this area until April, 1973 and will transfer all leads to instructional materials to NERCOE. CVTE will continue efforts in obtaining research materials. Any research documents acquired by the EIC's in the course of normal contacts will be given to CVTE.

II. CONTACT PROCEDURES

The initial contact will be made by mail (see attached sample of initial letter). The audience contacted will be determined by NERCOE's mailing list of educators throughout New England in conjunction with a list of educators supplied by CVTE. Each EIC will also make telephone and personal contacts within his own states. Appropriate follow-up procedures will be conducted by the EIC's or NERCOE as necessary. By asking a question such as "are any of your colleagues involved in a similar career education project?", the EIC will be able to expand his contact lists. In the event an EIC receives a lead on materials located outside the New England states, he will forward this information to CVTE by means of an informal memo to Mr. Daryl Ellsworth.

III. ACQUIRING MATERIALS

The EIC will request three copies of pertinent documents which have been identified. Two copies will be forwarded to CVTE for possible inclusion in the ERIC system and one copy will be housed at NERCOE. If two copies are obtained, each center will receive one. If only one copy is made available, NERCOE will either make a second copy and forward the original to CVTE, or will forward the original with a request that CVTE reproduce the document for NERCOE, within the budgetary limitations for copying.

All requests will be for complimentary copies. Generally, commercially published materials will not be included in the search effort, but will be considered for ERIC if a copy is provided on a complimentary basis. Any document which is obtained that contains a copyright statement will be processed in the following manner:

The EIC will determine if the document is available for sale. If the document is sold, NERCOE will forward the complimentary copy(s) to CVTE with a statement showing cost, agency where available, and address. CVTE assumes full responsibility for securing copyright releases for ERIC input. If complimentary copies are not made available, a listing will be generated and forwarded to CVTE for future consideration of purchase.

In all cases the EIC will attempt to secure up to three documents. If an agency indicates that it has already forwarded a particular document to CVTE, the EIC will secure one document for the NERCOE Clearinghouse if possible. In any event, the EIC should secure a citation of the document to be forwarded to CVTE for duplicate check.

Should the EIC encounter any nonprint materials (audiovisual materials) which are available for sale, he should attempt to secure one copy of the item with appropriate information for purchase. This will be forwarded to CVTE for possible inclusion in the ERIC system.

IV. COMMUNICATIONS

Basically, all communications will be conducted between CVTE/NERCOE and NERCOE/EIC. Should the need arise for an EIC to communicate directly with CVTE, the EIC will inform NERCOE of the date, time and telephone number of where he should be contacted. NERCOE will relay this message to CVTE who in turn will contact the EIC.

V. SHIPMENTS OF DOCUMENTS

Shipments of acquired documents will be made to CVTE during the first week of each month throughout the contract period. The shipment will be divided into three sections, separating the documents obtained by each EIC. Each section of every shipment will include a label with the following information:

1. Identification of EIC/state(s)
2. Package number
3. Number of items included

If the document does not contain complete bibliographic data (title, author, agency or source, date, number of pages, etc.) the EIC or NERCOE will attempt to obtain this prior to shipment to CVTE. A note should be attached to each document showing the name and address of the contributor in order that CVTE may be able to respond to the contributor concerning the process of the document.

VI. REPORTS

On a quarterly basis, NERCOE will forward to CVTE a report of the number, type, and known response of contacts made by mail, phone, and personal visits, along with other pertinent data. The format and style of records required for NERCOE reports to CVTE will be as decided by NERCOE, with the minimum data being a statistical summary, by state, of the contacts made and the nature of responses. An interim and final report format will be developed at a later date.

APPENDIX 3

New England
Resource Center
for Occupational Education
at E D C 55 Chapel St., Newton, Mass. 02160
(617) 969-7100 Cable NERCOE

Dear Educator:

Career education promises to be one of the most revolutionary changes to occur in public education during the second half of the 20th century. It will unify the curriculum around a career development theme and will attempt to provide each student with awareness, orientation, exploration, and preparation for a wider range of career options than ever before possible.

Not only will career education be focusing on all ages, pre-school through adulthood, but the concepts will appear in a variety of experiences -- traditional academic subjects such as mathematics, English, social studies, or science, as well as all areas of vocational and practical arts education.

NERCOE is initiating a special effort to acquire instructional materials, previously unpublished, in the growing field of Career Education. Curriculum guides, study guides, research reports, audiovisual aids, conference proceedings, bibliographies, guidance manuals, interpretative papers, even dissertations will be collected.

Although the enclosed flyers (which we hope you will post) encourages educators to contact us regarding this project, we feel it is important that NERCOE have a list of potential contributors that we may contact directly.

Therefore, we would appreciate your returning the enclosed card with the names of individuals you are acquainted with, who have developed, adopted, or adapted career education materials.

Cordially,

Ferucio Freschet

Ferucio Freschet
Director of Information Services

POST CARD RETURN

TO: PROJECT SEEK

FROM: Name _____

Address of Institution _____

Please list the names of individuals within your system who have information regarding instructional materials in Career Education that they may want to contribute to this collection.

Name _____

Tel. No. _____

Title _____

Address _____

Name _____

Tel. No. _____

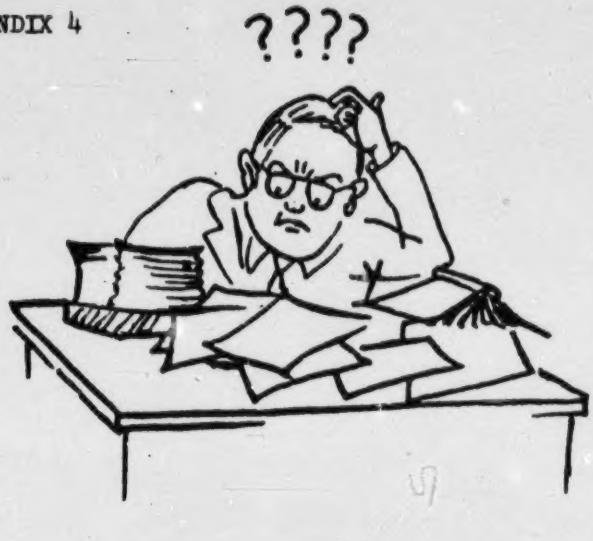
Title _____

Address _____

Other _ _____

_____ Sorry, I cannot provide you with any leads for instructional materials on Career Education.

APPENDIX 4



New England
Resource Center
for Occupational Education
at E D C 55 Chapel St., Newton, Mass. 02160
(617) 969-7100 Cable NERCO

Dear Educator:

Hello:

I've looked all over my desk, but I can't locate a reply from you to our letter sent during the week of January 8th concerning the acquisition of career education materials.

If you recall, we are specifically interested in acquiring career education instructional materials in any subject area or at any level so long as they help to advance individuals through stages of awareness, exploration, and preparation for a full range of careers.

Your response on the enclosed reply card (which asks for the names of individuals who may possess such materials) will be most helpful to us.

A Product Catalogue, listing available career education instruction materials collected from this search will be made available to you upon request.

Cordially,

F Freschet

Ferucio Freschet, Director
Information Services Program

If you have any questions or special concerns about the project, NERCOE's representative, Larry Brown, will be happy to assist you. He can be reached at PROJECT SEEK, 55 Chapel Street, Newton, Massachusetts, or phone (617) 969-7100 Ext. 386.

APPENDIX 5

Guidelines for Abstracting

The 200 word abstract should contain core elements of information so that the reader can evaluate the pertinence and usefulness of the document for his own situation. To ensure space and permit ease in reading, phrases rather than complete sentences may be used. Direct language and simple statements are recommended; this need not be a literary masterpiece. Justifiable evaluative statements may be used.

The abstract should contain the following information if available:

1. Credibility or experience of developer (if not apparent); resources used.

2. Amount and level of testing and/or usage.

3. Difficulty of adopting (e.g., cost, curriculum changes, special training)

4. Objectives and content.

5. Important items which cannot be indexed.

4/5/73
JDM & MCD

APPENDIX 6

Guidelines for Indexing

Instructional materials to be utilized by practitioners should have at least one index term representative of each of the following categories:

*1. Subject field - the field or fields of education in which this material would normally be utilized (e.g., agricultural education, office occupations education, industrial arts, mathematics education).

*2. Career field - the occupational field(s) or specific occupation(s) for which these materials may be utilized (e.g., service occupations, nursing, teaching, carpenters).

*3. Stage of career development - specificity of career information (e.g., career awareness, career exploration, career preparation).

4. Career activities - student activities related to career development (e.g., field trips, role playing, work experience programs).

*5. Level of Student - grade or age level (e.g., adult education, Grade 4, secondary grades, post-secondary education).

*6. Use of materials - Purpose for which materials were designed (e.g., study guides, teacher education, teaching guides).

7. Content of document - additional items of importance which should be reflected in the index terms (e.g., tests, bibliographies, tables, lesson plans).

APPENDIX 7

QUESTIONS FOR PANEL MEETING

Date: May 8, 1973

Event 1. Letter to state directors from CVTE seeking cooperation

a. Did the state directors cooperate?

b. Did the EIC's visit each state director?

c. What were the concerns expressed by state directors?

d. What did the state director do to facilitate acquisition?

e. What obstacles did he create? (i.e., special requirements, constraints, protocols)

f. Is legitimization by the state director necessary or desirable?

Event 2. Letter and reply card to 5600 New England educators to solicit materials and gain leads

a. How many answered the request?

b. How many items resulted from the first approach?

c. Principally, why wasn't there a better response rate?

d. How could initial contact be improved?

Event 3. Follow-up letter to 204 referrals by NERCOE to acquire materials

a. What percentage resulted in materials?

b. What was the reaction of contributors?

c. What percentage of leads resulted in materials?

Event 4. Follow-up letter to 4000 non-respondents to elicit a response

a. What percentage of non-respondents finally responded?

b. Why hadn't they responded earlier?

c. How were the non-respondents different than initial respondents?

d. How many non-respondents finally submitted materials?

Event 5. Distribution of news items on the project

a. How many articles appeared to solicit materials in

1. NERCOE's newsletter

2. State newsletters

3. Other newsletters

b. Could we get copies of these articles for the final report?

Event 6. EIC contacts in states

a. How many and what contacts were made at the state level?

b. How many and what contacts were made at the local level?

c. How productive were these contacts in terms of materials acquired? In terms of other benefits?

Event 7. General questions

a. Is this much effort worthwhile?

b. What could have been done better?

c. Would this work less well or better in another region?

d. What is the state-of-the-art in curriculum development in New England?

e. Is there material at the state and local levels that we failed to get?

f. Why didn't we get most of the materials?

g. What should be done next?

APPENDIX 8

INTERVIEW SCHEDULE

1. Name _____

   Address _____

   _____

   Phone _____

   Date _____

   Time _____

2. This is _____ at The Center for Vocational and Technical Education in Columbus, Ohio.

3. Establish purpose

   a. We sent you some materials last week. Did you receive them?

   b. If yes proceed. If no, express a sense of urgency by explaining that you will send a second set, AIR MAIL - SPECIAL DELIVERY. Obtain exact, best address. Schedule another telephone call.

   c. Do you have the material with you?

   d. If yes, proceed. If no, arrange to call back.

4. Questions - keep records on duplicate set for each respondent.

   a. Let's start with Document 1.

   b. Which abstract do you like best, A or B?

   c. Why do you like (A or B)?

   d. Why don't you like (A or B)?

   e. Which set of index terms do you like best, A or B?

   f. Why do you like (A or B)?

   g. Why don't you like (A or B)?

   h. Now, let's consider Document 2.

DOCUMENT 1

Abstract A --

This flexible curriculum guide for automotive technology, as the first in a series, includes a rationale, general and specific behavioral objectives, teaching suggestions, 25 brief instructional unit descriptions with equipment lists, and 4 sample job sheets. A glossary, a bibliography, lists of student and teacher requirements, and other resource materials are provided. This document was developed by vocational instructors at the high school and vocational school levels, the Maine Bureau of Vocational Education, and educators at the University of Maine. This guide will prove useful in vocational program planning both for beginning and experienced teachers, as well as for guidance personnel and administrators.

Abstract B --

Brief outlines for 25 instructional units for all students, particularly in continuing education and evening school situations, focus on providing skills in the automotive industry. Each unit lists a brief description, expected outcomes, and equipment needed. Sample unit breakdowns are included for: (1) steering gear, (2) starting systems, (3) ignition systems, and (4) body electrical and hardware. Developed by high school and technical institute instructors after an analysis of occupation. Each of 21 automotive occupations is displayed on a unit occupation chart, showing what units are required to accomplish the desired results. A time chart helps administrators fit these courses into the time and credit allocation of a particular school. Guidance personnel would find this useful in advising students on occupations. Also useful to curriculum committees and administrators for budgetary or facility requirements. Student and teacher qualifications included, also equipment list, reference media, glossary of terms, bibliography. No indication of testing or use.

Index Terms A

Vocational Education
Curriculum Guides
Course Descriptions
Auto Mechanics
Electromechanical Technology

Index Terms B

Industrial Arts
Curriculum Guides
Auto Mechanics
Adult Education
Career Preparation

1. Which abstract do you like best? A or B (circle)

2. Why?

3. Which set of index terms do you like best? A or B (circle)

4. Why?

DOCUMENT 2

Abstract A --

Developed by teachers of vocational and technical education, this curriculum guide was designed to assist beginning and experienced teachers in planning a program of instruction for students interested in seeking employment. Included are: (1) outlines of 37 instructional units, each specifying student achievement; (2) lists of tools and equipment useful for determining budget and facility requirements; (3) a chart designed to summarize the units which are necessary for each occupation at the job entry level, and (4) a flow chart suggesting the sequence of events in selecting and preparing for job entry. Appendices contain further information related to industrial electricity, specifically: (1) bibliographies of industrial electricity, and curriculum and methodology; (2) sample content analysis chart; (3) sample operation sheet; (4) sample operation sheet drawing; (5) sample information sheet; (6) student selection criteria, and (7) a glossary. Material is flexible and adaptable to situations such as high school, technical institutes, adult training and retraining. Could be used as guide for developing specific units tailored to individual needs for many levels.

Index Terms A

Curriculum Guides
Industrial Education
Electrical Occupations
Career Preparation
Secondary Education

Abstract B --

This flexible curriculum guide in industrial electricity will prove useful for beginning and experienced teachers in vocational program planning. Developed by teachers of vocational and technical education, educators at the University of Maine, and the Maine Bureau of Vocational Education, this guide includes a rationale, nine job descriptions with resource addresses, 37 brief unit descriptions, a glossary, and bibliographies. Lists of student and teacher requirements, an occupational flow chart, an occupational task analysis chart, and other resource materials are provided. Each unit description gives unit prerequisites, the unit scope and sequence, behavioral objectives, and tool and equipment lists.

Index Terms B

Vocational Education
Curriculum Guides
Electrical Occupations
Trade and Industrial Education

1. Which abstract do you like best? A or B (circle)

2. Why?

3. Which set of index terms do you like best? A or B (circle)

4. Why?

DOCUMENT 3

Abstract A --

Intended for developing a sequential career education curriculum at the elementary and junior high school levels, these tentative developmental guidelines were prepared by a curriculum advisory committee at a 2-day curriculum development workshop. A detailed rationale for career education and a general description of this exemplary project are included. A wide range of sample integrated units within a career education program are provided, each with resource lists, teaching ideas, and teaching techniques. Behavioral objectives and learning activities are included in a 3-column format for the junior high school grades, together with suggested subject areas and evaluation procedures. Various resource materials are included.

Index Terms A

Curriculum Development
Career Education
Developmental Programs
Guidelines
Student Development

Abstract B --

An outline for an integrated program of career education, Grades 1-9, listing objectives for each grade. Grades are grouped under general headings as follows: (1) Grades 1-3, Home, School, Neighborhood, Community, and Self-Image; (2) Grades 4-6, County, State, Region, Nation, and Self-Image; and (3) Grades 7-9, Occupational Clusters. Sample integrated units are outlined for (1) Grade 2 on the Post Office, (2) Grade 4 on Manufacturing in Vermont, and (3) Grades 7-8 on developing positive attitudes toward the world of work and transportation occupations, with units for math, social studies, science and linguistics. Also included are field trip procedures, equipment and materials lists, and an overview of the career education plan in the district. Developed by elementary staff curriculum committee representing Grades 1-9, in two meetings and a 2-day workshop. This preliminary edition will be finalized incorporating criticisms and suggestions. Purpose is to establish guidelines for integration of career education into the five town supervisory union. Guidelines could be used as a basis for developing specific guidelines relevant to a particular community.

Index Terms B

Career Education
Career Awareness
Curriculum Guides
Elementary Grades
Secondary Grades

1. Which abstract do you like best? A or B (circle)

2. Why?

3. Which set of index terms do you like best? A or B (circle)

4. Why?

DOCUMENT 4

Abstract A --

Developed by the staff at NOW Career Center, this is a collection of 8 forms and procedures for organizing field trips in career education. These are: (1) a form for locating field trip resources, (2) procedures for arranging field trips, (3) field trip information for resource persons, (4) procedures in carrying out an effective trip, (5) orientation information for student and teachers, (6) follow-up suggestions, (7) an outline of the teacher's role in career development, and (8) guidelines for interviewing resource persons. No indication of testing. These forms could be used as they are or adapted easily for use by any school or individual teacher.

Abstract B --

These guidelines for arranging field trips were developed by the NOW staff as a career education technique. Included are sample letters for resource persons, a definition of a career education field trip, various suggestions for teachers, and follow-up ideas. Orientation procedures for students are included, as well as a brief resource list of career development materials.

Index Terms A

Career Education
Career Awareness
Learning Activities
Field Trips
Resource Guides

Index Terms B

Career Education
Guidelines
Field Trips
Teaching Techniques
Human Resources

1. Which abstract do you like best? A or B (circle)

2. Why?

3. Which set of index terms do you like best? A or B (circle)

4. Why?

DOCUMENT 5

Abstract A --

Outlines for eight units for grades 11 and 12 focus on making the student define and develop his individual approach to choosing a job, getting hired and conducting himself properly on the job. Units are grouped generally by (1) self appraisal, (2) examination of the world of work, and (3) decision making about a job. Includes specific audio visual materials and address of distributors. Each unit lists student objectives and suggested learning experiences. Specific experiences include: (1) writing a job resume, (2) matching personal interests with occupational alternatives, (3) reading and answering want ads, (4) interviewing techniques, in person and by phone, and (5) exploring worker responsibility to employer. Some procedures refer to preexisting lessons which are not included in this document, but the materials would still be useful as a general guide. An Educational Preference Inventory helps the student classify individual jobs, and an individual occupational analysis form helps him analyze individual jobs. Developed by a career education teacher, a career education director of city schools and an educational consultant. No indication of testing or cost of development.

Index Terms A

Career Education
Career Exploration
Self Evaluation
Grade 11
Grade 12
Curriculum Guides

Abstract B --

This curriculum guide for a career education program in Grades 11 and 12 contains a rationale for career education, general and specific behavioral objectives involving self evaluation, occupational awareness, and decision making skills, and eight instructional unit outlines. Developed by a curriculum committee that includes a career education teacher, an administrative assistant, and a resource consultant, each curriculum unit provides specific objectives, suggested teaching procedures and learning activities, and resource lists. Teaching techniques include the use of audiovisual aids, small group discussions, resource speakers, research activities, and "real-life" activities.

Index Terms B

Curriculum Guides
Career Education
Learning Activities
Teaching Techniques
Vocational Education

1. Which abstract do you like best? A or B (circle)

2. Why?

3. Which set of index terms do you like best? A or B (circle)

4. Why?